

MEMORANDUM

To: Sean Vincent – Hydrology Section Manager

From: Monica Van Bussum – Water Supply Bank Coordinator

Date: February 23, 2012

Re: Review of Ark Properties LLC Application to Rent Water from the Water Supply Bank

As you'll remember, a number of us met on February 22 to discuss the Ark Properties LLC Water Supply Bank rental application. I'll review the water use proposed by the application, then where the Bank proposes to get the water to satisfy the rental request. After discussing this with Jeff Peppersack, he would prefer we get opinion from you and/or your group on whether there are any great reservations to moving the water in this manner.

On January 17, 2012, the Department received an application to rent water from the State Water Supply Bank from Ark Properties LLC. The applicant proposes to rent enough water to irrigate 200 acres from 2012 through 2016 in Township 1 North, Range 4 East, Sections 13 and 24, as well as Township 1 North, Range 5 East, Sections 18 and 19. I have included a scanned copy of the application. After its initial review, the Bank denied the rental request in a letter dated February 8, 2012, also attached. The applicant proposes to use ground water to irrigate the proposed rental place of use (POU). The well locations are noted on the attached application.

A review of rights available from the State Water Supply Bank indicates the proportions of the following rights are available:

- 61-2188 and 61-7151 – combination of these rights provides for a lease of 1.86 cfs, 694.6 AF annually and the irrigation of 163 acres
- 61-12148 – the balance of the rental request would be filled by a portion of the lease in the amount of 0.48 cfs, 148 AF annually and the irrigation of 37 acres

The point of diversion for 61-2188 and 61-7151 is in Township 4 South, Range 5 East, Section 24, SWNE. The point of diversion for 61-12148 is located in Township 4 South, Range 5 East, Section 25, NWNW. A check of administrative areas indicates all the wells are located within the Mountain Home Groundwater Management Area. However, the proposed points of diversion for the rental are just outside the GWMA to the northwest.

I look forward to talking with you more about this and to see if your group can offer an assessment.

4. According to Department records, there are seven wells within a 1-mile radius of the two wells that are proposed as the irrigation PODs (Figure 2). Of these, two are domestic wells that are located within the place of use, two are observation wells that are currently monitored by IDWR as part of the Comprehensive Aquifer Management Plan (CAMP) Program, and three are domestic wells located outside of the proposed place of use. The potential for injury to the domestic well owners is made less likely by the fact that the production intervals are relatively shallow in comparison to the completion intervals for the irrigation wells and the sedimentary aquifer system is layered. The bottom of the deepest domestic well interval is 320 feet below land surface (ft-bls) and the irrigation well production intervals are 432 to 452 ft-bls and 602 to 750 ft-bls. Well driller's logs are provided in Attachment 2.
5. The applicant has argued that the use of rental water at the proposed place of use will provide an opportunity to gather much need data with less risk to area water users because the new PODs are temporary. I agree with this argument because the applicant is making a commitment to collect meaningful aquifer performance data and to provide those data to the Department.
6. Given the need for aquifer performance data in the East Ada/West Elmore County study area, I recommend approving the rental application for the 2012 irrigation season subject to Department approval of a monitoring/data reporting plan. The data reporting requirement should include all existing data that has been collected by or on behalf of the applicant in relation to the proposed place of use.
7. If the rental is approved, the value of the applicant's data collection effort will depend on the availability of suitable monitoring locations and the successful implementation of the monitoring program. I would be glad to review and discuss the monitoring plan with the applicant's technical representative.